
**Information technology — Coding of
audio-visual objects —**

**Part 4:
Conformance testing**

**AMENDMENT 46: Conformance testing
for internet video coding**





COPYRIGHT PROTECTED DOCUMENT

© ISO/IEC 2019

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*.

A list of all parts in the ISO/IEC 14496 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Information technology — Coding of audio-visual objects —

Part 4: Conformance testing

AMENDMENT 46: Conformance testing for internet video coding

Clause 2

Add the following new references:

ISO/IEC 14496-5, *Information technology — Coding of audio-visual objects — Part 5: Reference software*

ISO/IEC 14496-33, *Information technology — Coding of audio-visual objects — Part 33: Internet video coding*

Clause 13

Add the following new clause:

13 Internet video coding

13.1 General

This clause specifies tests designed to verify whether bitstreams and decoders meet the normative requirements specified in ISO/IEC 14496-33.

Characteristics of coded bitstreams and decoders are defined in ISO/IEC 14496-33. An encoder can claim conformance to ISO/IEC 14496-33 if the bitstreams that it generates are conforming bitstreams. Decoder characteristics define the properties and capabilities of the applied decoding process. The capabilities of a decoder specify which bitstreams the decoder can decode and reconstruct. A bitstream can be decoded by a decoder if the characteristics of the bitstream are within the specified decoder capabilities.

Procedures are described for testing conformance of bitstreams and decoders to the requirements defined in ISO/IEC 14496-33. Given the set of characteristics claimed, the requirements that shall be met are fully determined by ISO/IEC 14496-33. This clause summarizes the requirements, cross references them to characteristics, and defines how conformance with them can be tested. This clause also gives guidelines on how to construct bitstream test suites to check or verify decoder conformance. In addition, a set of test bitstreams implemented according to those guidelines are provided at <http://standards.iso.org/iso-iec/14496/-4/ed-2/amd/46/en>.

13.2 Conformance for ISO/IEC 14496-33

13.2.1 Normative tests for verifying conformance

The following subclauses specify normative tests for verifying conformance of video bitstreams as well as decoders. These normative tests make use of test data (bitstream test suites) provided at <http://standards.iso.org/iso-iec/14496/-4/ed-2/amd/46/en> and the reference software decoder provided in ISO/IEC 14496-5 for ISO/IEC 14496-33 with source code included in ISO/IEC 14496-5 in electronic format.